Errata for Master's Thesis - Defects and conductivity in Sr-doped $LaNb_3O_9$

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Page 7 – Line 10 from the bottom

$Sr_xLa_{1-x}Nb_3O_{9-\alpha}$ *should be:*

$La_{1-x}Sr_xNb_3O_{9-\alpha}$

Page 9 – Line 2 from the top

…several ordered point defects can compose line defects and shear defects. *should be:*

…several ordered point defects can compose line defects.

Page 15 – Line 12 from the top

…oxide is called an n-type semiconductor… *should be:*

…oxide is called a p-type semiconductor…

Page 16 – Equation (2.22)

$\frac{d\ln K}{d(1/T)} = -\frac{\Delta H}{R}$ *should be:*

$\frac{d\ln K}{d(1/T)} = -\frac{\Delta H^0}{R}$

Page 16 – Equation (2.28) and (2.29)

$2O_2(g) = V_{La}^{///} + V_{Nb}^{5/} + 4O_O^X + 8h^\bullet$

$K_{V_M} = \left[V_{La}^{///}\right]\left[V_{Nb}^{V}\right]p^8 p_{O_2}^{-2}$ *should be:*

$3O_2(g) = V_{La}^{///} + 3V_{Nb}^{5/} + 6O_O^X + 18h^\bullet$

$K_{V_M} = \left[V_{La}^{///}\right]\left[V_{Nb}^{5/}\right]^3 p^{18} p_{O_2}^{-3}$

Page 19 – Line 4 from the top

…(see section (2.4.3). *should be:*

…(see section (2.4.3)).

Page 22 – Equation (2.47)

$p = \left[Sr_{La}^{/}\right]$=constant *should be:*

$\left[Sr_{La}^{/}\right] = p$=constant

Page 23 – Equation (2.52)

$\left[V_O^{\bullet\bullet}\right] = K_{V_O^{\bullet\bullet}} n^{-2} p_{O_2}^{\frac{1}{2}}$ *should be:*

$\left[V_O^{\bullet\bullet}\right] = K_{V_O^{\bullet\bullet}} n^{-2} p_{O_2}^{-\frac{1}{2}}$

Page 53 – Text under Figure 4.4 the last sentence

The peas at the bottom… *should be:*

The peaks at the bottom…

Page 53 – Text under Picture 5.2
EDT-picture representing the average… *should be:*
ETD-picture representing the average…

Page 67 –Erase sentence

- Reciprocal measurements (see equation 4.3) require a symmetrical sample.

Page 82 – Line 7 to 10 from the top
Thus, at low pO_2 the electroneutrality is $3[V_{La}^{///}]=[D_{La}^{\bullet}]$. At high pO_2 the dependence of the conductivities changes and shows a minimum, which is also consistent with the suggested model. The electroneutrality is $[D_{La}^{\bullet}]=n$ and the model relates the minimum of the pO_2 the dependence to p-type conductivity… *should be:*

Thus, at low pO_2 the electroneutrality is $[D_{La}^{\bullet}]=n$. At high pO_2 the dependence of the conductivities changes and shows a minimum, which is also consistent with the suggested model. The electroneutrality is $3[V_{La}^{///}]=[D_{La}^{\bullet}]$ and the model relates the minimum of the pO_2 the dependence to p-type conductivity.